ETF TRENDS & OUTLOOK

Strategic Developments for Index, Semi-Active, and Active ETF Solutions

FRC

SHARPEN YOUR EDGE[SM]

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SEVEN KEY TRENDS TO WATCH IN THE ETF MARKET

TREND #1

Passive products will continue to clip flows from actively managed products.

Over the past five years, 30% of fund industry net flows have gone to passive products (with 68% of that to ETFs). There are fewer than two dozen manufacturers vying for the passive net flow into index funds and ETFs, compared to 500 manufacturers competing for the remaining 70% of actively managed flows.

TREND #2

Large-cap "core" products are at the greatest near-term risk to the passive threat.

FRC research suggests that advisors are substituting index products (ETFs) for mutual funds and SMAs in core equity categories. Preliminary FRC research reveals that SMAs may be most vulnerable to this threat, as the greatest opportunity for SMA manufacturers is in the large-cap categories and it is increasingly difficult for investment managers to differentiate themselves in this area.

TREND #3

ETFs are one aspect of a "solution" for retail investors, not a free-standing solution.

ETF fund-of-funds products, such as the Seligman TargETFunds, will be regarded as a fad. ETFs will find their greatest demand as one aspect of a "solution" among many product types brought together via portfolio construction techniques. Specialized ETFs, like the highly successful gold ETF, will be used more and more in portfolio construction. As a result, ETFs should be viewed as complementary to traditional funds.

TREND #4

ETF product development will take a trifurcated approach in coming years.

To generate more elements to be used in portfolio construction, manufacturers will take a three-pronged approach to ETF product development:

- Continued development of enhanced index funds
- Segmenting of sector indexes
- Expansion of commodity indexes

TREND #5

Product development in actively managed ETFs will gain momentum in 2006.

At least two different methods of approaching this opportunity are in SEC filings by the American Stock Exchange, Firsthand Funds, and Managed ETFs. There are also other strategies that are being developed to bring an actively managed ETF to market. This is clearly an area to watch as once the first active ETF makes it to market, the flood gates will open. Active ETFs would present game-changing opportunity for many manufacturers and distributors.

TREND #6

Enhanced index funds, loosely positioned as "semi-active," will attempt to gain positioning as actively managed ETFs.

Enhanced index mutual funds have enjoyed limited success in the retail mutual fund marketplace. Consequently, the success of these products in the ETF space is likely to be viewed as more transitional, rather than a long-term growth opportunity in the retail market. However, we will likely see the entrance of more enhanced index manufacturers in 2006.

TREND #7

More firms will build or acquire ETF manufacturing expertise.

Not only does AMVESCAP recognize the growing threat of ETFs, but its acquisition of PowerShares illustrates the business strategy of manufacturers providing the products that their distribution partners are requesting. This has been a key driver for mutual fund firms to enter the less-profitable SMA marketplace, compared with high-margin mutual funds, and will extend to ETF products as well.

SUBJECT MATTER EXPERT

David Haywood

David is a Vice President and Director of Separately Managed Accounts & Alternative Products Research at FRC. He has worked on engagements relating to market research, product development, distribution, and marketing within the separately managed account, ETF, hedge fund, and closed-end fund disciplines.

In addition to providing consulting services, he has authored a number of research reports focusing on product development and distribution. In 2005, David co-authored the study *Building SMA Distribution: Strategies for Success in the Wealth-Management Market*, which examined emerging financial solution distribution trends and recommended tactics that asset managers can execute to build-out a profitable SMA business line.

Before joining FRC in 1997, David managed a market research and competitive intelligence unit that supported the marketing and strategic planning initiatives for Funds Distributor, Inc. and its clients. Prior to joining FDI, David spent seven years at Pioneer Mutual Funds. During his time in Pioneer's marketing research department, David was actively involved in strategic planning, competitive analysis, primary research concerning financial advisor markets, product development, product positioning, performance reporting, and fee and expense analysis.

David received a Bachelor of Science degree from Florida State University.

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As a research analyst at FRC, Owen engages in the analysis of trends within the financial services industry. He regularly contributes articles to FRC's suite of publications, while also assisting FRC's subject matter experts with advanced analytical research. Owen also serves as editor of the monthly *FRC Alternative Products Views on the News.*

Recent articles that Owen has contributed to the FRC Monitor include "Passive vs. Active International Funds," "2005's Pioneering Product Ideas & Trends," and "Small-Cap Fund Performance Differential."

Owen earned a Bachelor of Arts degree with a double major in economics and international relations from The College of William and Mary.

STUDY EDITOR

Charles W. Bevis

Charlie is the editor-in-chief of research publications at FRC. In this role, he helps to sharpen the delivery and communication of the complex information and strategy contained in FRC studies, white papers, and analytical reports. Charlie is also the editor-in-chief of the *FRC Monitor*, a monthly research report for clients, where his primary focus is topic selection to keep clients abreast of the trends shaping distribution and product development for mutual funds and other investment products.

Prior to joining FRC in 1998, Charlie spent twenty years in investment management and product development positions, including director of institutional asset management services at Allmerica Financial, stable value portfolio manager at State Street Bank & Trust, and GIC product manager at New England Life.

Charlie has also developed a freelance writing business specializing in baseball history. He has written two books, *Sunday Baseball: The Major Leagues' Struggle to Play Baseball on the Lord's Day, 1876-1934* published in 2003 and *Mickey Cochrane: The Life of a Baseball Hall of Fame Catcher* published in 1998. He has also written numerous articles on baseball history, which have been published in research journals, magazines, and newspapers.

He holds a Bachelors of Arts degree in mathematics from the University of New Hampshire.

EXECUTIVE SUMMARY

CHAPTER ONE
DYNAMICS OF ETF GROWTH

The history of the ETF is far more ipodic than Mesozoic, barely spanning a dozen years since State Street Bank & Trust introduced the Standard & Poor's Depository Receipt, or SPDR, in 1993.

As seen in Exhibit ES-1, assets grew slowly in the early years of the ETF, gaining some momentum in the later stages of the 1990s' bull market, tempering during the bear-market years of 2001 and 2002, and dramatically accelerating in the bull market that began in 2003, topping $300 billion at year-end 2005.

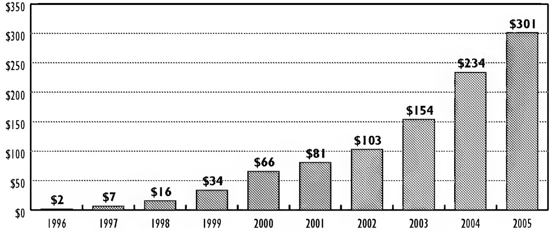
Three firms are largely responsible for the growth of the ETF industry—State Street Global Advisors, Bank of New York, and Barclays Global Investors. These three firms account for an overwhelming share of the ETF market, more than 90% combined at year-end 2005.

FRC projects that ETF assets will surpass $1 trillion by year-end 2010, as FRC expects the ETF market to grow at a 29% clip over the five-year period 2007-2011. The 29% CAGR for ETF growth is the highest growth rate among the retail investment products followed by FRC.

CHAPTER TWO
GROWTH DRIVERS OF ETFs

To support FRC's projected 29% growth rate for ETFs through 2010, there are multiple factors within three levels of the financial services industry that will drive demand for ETFs. These factors are summarized in Exhibit ES-2 on the following page.

Exhibit ES–1
ETF Asset Growth, 1996–2005
($Billions)



Source: Financial Research Corporation

Exhibit ES–2
Drivers of ETF Growth

ENVIRONMENT	**Investments** Actively Managed vs. Passive	**Markets** Advisor-Assisted Channels Retirement Plans	
COMPANIES	**Distributors** Institutionalization of Retail Fee-Based Accounts	**Manufacturers** Multiple Product Structures	**Service Providers** Morningstar Entrée
INDIVIDUALS	**Advisors** Value-Added Services Portfolio Construction	**Investors** Fee Levels Market-Timing Concerns	**Portfolio Managers** Cash Substitute Sector Allocations

Source: Financial Research Corporation

Environment

Expectations for investment return and new markets are both influencing greater use of ETFs by individuals and the advisors that serve them.

Investment Returns—There is a general inability of actively managed funds to outperform passive products, a conclusion that numerous academic studies have confirmed. Institutional investors have also embraced the index-outperforms-active principle in droves, and retail investors are beginning to follow the lead of institutional investors.

New Markets—ETF sales through the advisor-assisted channels have increased over the past two years, to lessen dependence on sales through do-it-yourself investors. Fee-based accounts are responsible for the increase in advisor-assisted sales, as they remove the economic barrier to ETF usage (no commission baked in), since advisors are paid directly by investors and from the investment product provider.

Companies

Company-specific factors are driving ETF growth within three types of firms—distributor, manufacturer, and service provider.

Distributors—Two distinct trends are helping to drive increased use of ETFs among distributors:

- Institutionalization of retail
- Fee-based accounts

Institutionalization is manifesting itself in retail markets as individual investors increasingly use the three main attributes of the investing process used by institutions—stating the goal, constructing the portfolio, and selecting the managers. In light of this increasingly institutionalized approach to investment product purchasing, retail investors are employing approaches that focus on outcome orientation and product solutions. Both of these trends bode well for increased use of ETFs.

Distributors are actively transitioning their advisors to fee-based client relationships from

commission-based ones. This movement to fee-based investing arrangements can be considered an inexorable trend for two reasons:

- Better predictability of profits and stability of revenue streams at distributors
- Greater objectivity in the advisor/investor relationship, leading to less perceived conflict of interest and enhanced client retention rates at distributors

Manufacturers—Investment managers are moving beyond mutual funds to actively pursue business opportunities in multiple product segments like separately managed accounts and ETFs as well as institutional opportunities. One reason for this trend is the stability of revenue streams and predictability of profit levels, the same reasoning that is driving distributors to convert to fee-based client accounts. A second reason is the extreme intensity of competition in the mutual fund industry, with more than 500 firms competing for fund flows.

Service Providers—In March 2006, Morningstar began issuing its well-known star ratings to ETFs, the first widely recognized research firm to extend analytical coverage into the ETF space. Another group of service providers that will stimulate interest in ETF products are the firms offering unified managed account structures. Due to the complexity of the UMA architecture, specialty firms like Placemark and FundQuest have evolved to work with distributors small and large to implement UMA structures.

Individuals

Three types of individuals will drive demand for ETF usage:

- Advisors
- Individual investors
- Portfolio managers

Advisors—Investment strategies used by advisors are increasingly employing a core-and-satellite approach, where broad-based domestic equity products serve as the core of the portfolio, while more style-specific products complement the core by either enhancing return or reducing risk. The use of low-cost, broad-based ETFs as the core of a portfolio could help to maximize the risk/return proposition, perhaps making ETFs an attractive alternative to separately managed accounts and mutual funds.

Individual Investors—The mutual fund trading scandals initially exposed in September 2003 have created demand for ETF products to avoid risks present in mutual fund products. Unlike mutual funds, the fair-value pricing of ETFs eliminates the potential damage caused by market-timing activities. Due to increased awareness among individual investors of the fee levels embedded in mutual funds, ETFs have gained enormous publicity in the media for their low fees.

Portfolio Managers—To optimize the investment process, portfolio managers for mutual funds and institutional accounts are finding new ways to deploy ETFs. For example, portfolio managers often use ETFs to adjust sector weightings or gain geographic exposure when it is too costly to analyze and purchase individual holdings. Similarly, mutual fund managers that are experiencing redemptions are also using ETFs to manage cash flows on a cost-effective basis.

CHAPTER THREE
ETF OPPORTUNITIES IN PACKAGED SOLUTIONS

The growth of "packaged" investment solutions, such as lifecycle portfolios, has blossomed in popularity with investors. The funds allow

investors to pursue a strategy that even investors with limited investment knowledge can understand and select based on the their investment goal, which is generally retirement.

Clearly, the benefits of ETFs such as low cost, simplicity, ease of use, and investor awareness have not gone unnoticed by product manufacturers looking to gain a competitive advantage in the crowded packaged solution space, where creating differentiation points is difficult. As a result, a number of manufacturers are creating solutions that are based on ETFs.

FRC believes the use of ETFs in packaged solutions is a trend that will likely continue both in mutual funds, commingled funds, and even extending into packaged separately managed account portfolios.

Drivers of Using ETFs—FRC has identified five important trends that are driving packaged solutions to include ETFs:

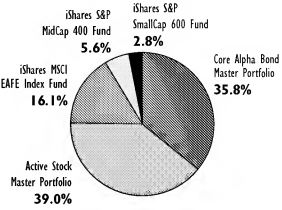
- Positive PR surrounding ETFs
- Choice is perplexing
- Institutionalization of retail sales
- Price sensitivity in fund-of-funds products
- Advisor focus on sales and service

Creating a Fund-of-ETFs Structure—While there are a number of funds that invest in ETFs, one of the most innovative packaged ETF solution is the Seligman TargETFund. The key to success with these products is promoting the low cost, diversification, and overlay portfolio management capability. These types of funds may make sense for firms targeting the DC market that may not manage top-performing underlying funds. Or they may not manage funds in all the asset classes necessary to build a successful lifecycle fund.

ETFs in Lifecycle Funds—ETFs can definitely serve a role in lifecycle product development,

Exhibit ES–3
Use of iShares ETFs in Barclays LifePath Mutual Funds

BARCLAYS 2020 FUND



Source: Barclays

especially in products that use passive strategies, but also to respond to the trend toward pricing transparency. Manufacturers can also use ETFs to help differentiate their lifecycle products within an increasingly crowded marketplace, through more aggressive mixes of asset classes and a broader array of asset classes with the portfolio. This is the case whether the portfolio is run on a passive basis or in an actively managed approach. As shown in Exhibit ES-3, target-date funds at Barclays utilize ETFs for smaller, more esoteric asset classes to complement the large allocations to core equity and fixed-income positions.

ETFs in Managed Accounts—Like ETF fund-of-funds solutions, managed account solutions utilizing ETFs are gaining momentum, especially as segments of multiple discipline products, or MDPs. ETFs are increasingly being used to supplement active management in investment disciplines that are difficult to execute in a retail separate account. This is

particularly true in small-cap disciplines, where asset managers often experience constraints on their investment capacity.

IXIS has been a leader in developing MDP solutions that utilize ETF products. Two of the firm's more prominent product development initiatives in this area are its Managed ETF Portfolios (MEP) and Active China Strategy.

ETFs in Retirement Plans—Although ETF usage is growing in the retail market, thus far the product has been unable to penetrate the DC market to any significant degree. ETFs have been utilized in DC plans via three investment vehicles:

- Fund-of-funds mutual funds
- Collective trusts
- Brokerage windows that allow direct ETF access

Collective trusts appear to have the greatest potential in the near term to make use of ETFs in the retirement plan space. Collective funds tend to be cheaper to offer than mutual funds because they don't have to pay for retail distribution. In addition, investors usually stay invested longer, which cuts down on transaction costs. They also offer a more customizable pricing structure than a mutual fund.

CHAPTER 4
OPPORTUNITIES FOR MANUFACTURERS IN ETF PRODUCTS

There are significant opportunities for product manufacturers in the ETF space, even though Barclays Global Investors and State Street Global Advisors together control about 85% of the ETF assets in the United States. The market positions of four ETF manufacturers are summarized on the following page, the two titans—Barclays and

BARCLAYS GLOBAL INVESTORS

BY THE NUMBERS

- $170 billion in 100+ iShares and trusts (Gold, Silver, et al)
- 57% market share
- 47% compound annual growth rate of net sales for the five-year period 2001-2005
- 9 of the 10 top-selling ETFs during 2005

STATE STREET GLOBAL ADVISORS

BY THE NUMBERS

- 35 ETFs with $84 billion in assets
- 28% market share
- SPDR represents 69% of the firm's ETF assets
- streetTRACKS Gold Shares garnered $3.2 billion in assets in its first year of operations.

VANGUARD

BY THE NUMBERS

- 23 ETFs with $11 billion in assets
- 4% market share.
- $5 billion ETF net flow in 2005
- 17% of ETF assets deployed within the firm's own mutual funds

POWERSHARES

BY THE NUMBERS

- 37 ETFs with $5 billion in assets
- 1% market share
- Reached $3 billion in ETF assets in less than three years
- Premium-priced product (60 bps)

State Street—and two up-and-coming firms—Vanguard and PowerShares.

New Entrants—Manufacturers looking to establish viable products in the ETF marketplace will be challenged to differentiate themselves in a marketplace that is becoming increasingly saturated with duplicative product. Opportunities to bring fresh or proprietary indexes to life still exist. In addition, a number of start-ups have sought to take advantage of the "first mover effect" by focusing their product development efforts on launching hotly anticipated products.

Product Innovation Key to Manufacturer Success—Achieving and maintaining success in the ETF marketplace requires a mixture of brand strength, product ingenuity, and opportunism. Firms have attempted to build the proverbial better mousetrap through three approaches:

- Enhanced Index—ETFs targeted as core portfolio options intended to supplant "run-of-the-mill" index funds.
- Investment Tools—ETFs that simplify the investment management process, or in effect "democratize" certain asset classes.
- Institutional Appeal—Any volatile sector/ industry where reasonable volume can be expected will soon likely have an ETF tracking a portfolio of stocks.

Leveraging ETFs in Mutual Fund Products—A handful of firms, including Seligman and USAA, have launched open-end funds that invest primarily in ETFs. Many firms that have been considering the launch of fund-of-ETF products have tended to be relatively small registered investment advisors.

CHAPTER FIVE
THE CHALLENGES WITH ACTIVE ETFs

Active ETFs are often considered to be the Holy Grail of the ETF industry. The opportunity to market an active ETF is an attractive proposition for manufacturers for four reasons:

- Tap into the $7 trillion actively managed fund business
- Open up new distribution channels, including institutional markets and global markets
- Allow managers to remain fully invested, since no cash position is needed for investor redemptions.
- Offer a lower-cost share class for investors

However, for some years now, the introduction of active ETFs has been "just a year away." While the opportunity is enormous, so are the challenges, risks, and costs.

Semi-Active ETF Products—Enhanced index funds have been loosely positioned as "semi-active" products, attempting to gain positioning as active ETF managers. To date, these funds have been relatively successful and have generated an enormous buzz, as they provide differentiation, low cost, and simplicity combined with the lure of active returns. These products also serve as an entry point for new players to the market.

Mechanics of Active ETFs—By its nature, an ETF is transparent; that is, anyone can see the holdings in the basket at any time. Money managers do not like others to see what they hold in their portfolios, and a specialist on the floor of the stock exchange will find it extremely difficult to hedge their risk in making a market for the ETF.

In designing an active ETF, then, the core challenge is finding a way to allow the specialists and market-makers to do their jobs without unduly exposing the active manager's stock-

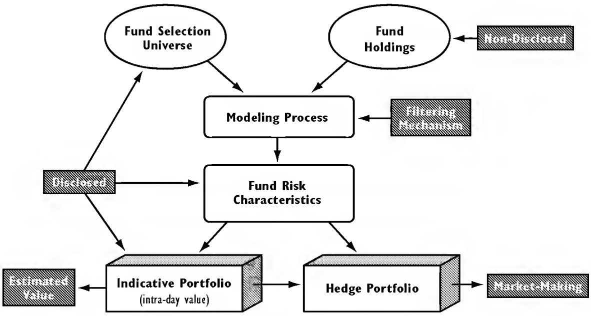
selection strategy. While a number of firms are attempting to solve this problem, two organizations in particular have been out in front:

1. Managed ETFs—This firm plans to tell market participants each day what securities they need to compile creation or redemption baskets for its active ETFs, only it will hide its recent buys and sells until they are complete. Managed ETFs also plans to give the market not one, but two types of intraday values for its portfolios, and would reveal every 15 seconds a version of the precise portfolio value that would give market participants an idea of which way the portfolio value is trending.
2. American Stock Exchange—The AMEX plan would use quantitative models to construct a proxy portfolio that closely mimics the fund's risk characteristics. The proxy portfolio would be designed to give specialists enough information, including an intra-day share value based on the proxy portfolio every 15 seconds, to hedge their trading positions without exposing the manager's trades.

Opportunities for Active ETFs—FRC believes that there are two primary reasons why an active ETF has not yet made it to market:

1. While being first to market is a critical competitive advantage for index ETFs, it is of less importance to active funds. In most cases, it is better to follow than to lead in the financial services space. Since there are no advantages to being first, most competitors are waiting for others to pave the way.
2. At the end of the day, investment management is concerned with portfolio transparency. Managers will need to believe in the systems in place to protect their trading, but the confidence level is not there yet.

Exhibit ES–4
Actively Managed ETFs—Solution (Patents Pending)



Source: AMEX

For these reasons, a new entrant or less-established firm attempting to gain broader distribution will likely be the first to market with an active ETF fund. The fund will likely be a large-cap product that will allow the specialists to trade efficiently.

FRC sees eight competitive advantages for active ETFs that will drive their success in the retail marketplace:

- Lower-cost offering
- Eliminates market-timer distortion of performance
- Tax efficiency
- Lower distribution costs
- Greater insight into investment process
- Easier access to intermediary distribution
- Access to global markets
- Ability to short sell

Reality of Active ETFs in Global Markets—Active ETFs exist in non-U.S. markets. The introduction of active ETFs in Germany and Australia has, if nothing more, demonstrated the concept's viability and given U.S. regulators and product management teams at asset managers an opportunity to study the product in a real world context.